

Eye Bolt Sensor



FEATURES

- Single or Double Bridge
- Sealed to IP67
- Protection against hydraulic oils
- Built to order.

APPLICATIONS

- Test rigs
- Research and development
- Where there is limited space where traditional load cells cannot be used

DESCRIPTION

The S-EBS is an eye bolt or rod end with a full wheatstone bridge bonded to it. Therefore transforming the bolt into a load cell. The performance will depend on the quality of the bolt's performance. Either PCM or the customer can supply the bolt. The installation can be either externally bonded (as the above picture), or internally bonded. The build specification will be established during the quotation stage as there are plenty of options available.

TYPICAL SPECIFICATION

PARAMETER	VALUE	UNITS
Capacity	To suit the bolt size	$\mu\epsilon$
Rated Output	Dependant on bolt size and diameter	mV/V
Linearity & non repeatability	Typically 0.25% depending on bolt quality	$\pm\%$ of Rated Output
Zero Return after 30 minutes	0.15	$\pm\%$ of Applied Load
Zero Balance	1.5	$\pm\%$ of Rated Output
Temperature Range: Operating	-30 to +80	$^{\circ}\text{C}$
Temperature Effect: On zero	0.2	$\mu\text{V}/\text{V}/^{\circ}\text{C}$
Safe Overload	150	% of Rated Capacity
Ultimate Overload	300	% of Rated Capacity
Excitation: Recommended	10	Volts AC or DC
Excitation: Maximum	15	
Input Impedance	120–350 nominal	ohm
Output Impedance	120–350 nominal	ohm
Insulation Resistance	>2	$\text{G}\Omega$ at 50VDC
Deflection at Rated Capacity	NA	mm
Weight (approximate) :	NA	kg
Construction	Steel—depending on bolt	
Environmental Protection	IP67	
Cable	Optional	